

Table 1. 2003 Summary Statistics

Item	Value	U.S. Rank
North Dakota		
NERC Region(s).....		MAPP
Primary Energy Source		Coal
Net Summer Capability (megawatts).....	4,664	41
Electric Utilities	4,563	35
Independent Power Producers & Combined Heat and Power	101	49
Net Generation (megawatthours)	31,322,129	38
Electric Utilities	31,075,012	32
Independent Power Producers & Combined Heat and Power	247,117	48
Emissions (thousand metric tons)		
Sulfur Dioxide	128	22
Nitrogen Oxide	70	28
Carbon Dioxide	31,770	30
Sulfur Dioxide (lbs/MWh).....	9.0	9
Nitrogen Oxide (lbs/MWh).....	4.9	3
Carbon Dioxide (lbs/MWh).....	2,236	3
Total Retail Sales (megawatthours)	10,461,108	46
Full Service Provider Sales (megawatthours).....	10,461,108	43
Direct Use (megawatthours).....	166,558	44
Average Retail Price (cents/kWh).....	5.47	45

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2003

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
North Dakota			
1. Coal Creek.....	Petroleum, Coal	Great River Energy	1,116
2. Antelope Valley.....	Petroleum, Coal	Basin Electric Power Coop	900
3. Milton R Young.....	Petroleum, Coal	Minnkota Power Coop Inc	705
4. Leland Olds.....	Petroleum, Coal	Basin Electric Power Coop	669
5. Coyote.....	Petroleum, Coal	Otter Tail Power Co	427
6. Garrison.....	Hydro	USCE-Missouri River District	371
7. Stanton.....	Petroleum, Coal	Great River Energy	188
8. R M Heskett.....	Gas, Coal	MDU Resources Group Inc	104
9. FPL Energy North Dakota Wind I/II.....	Other	FPL Energy North Dakota Wind LLC	62
10. Jamestown.....	Petroleum	Otter Tail Power Co	45

See footnotes at end of tables.

Table 3. Top Five Providers of Retail Electricity, 2003
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
North Dakota						
1. Northern States Power Co.....	Investor-Owned	2,070,050	745,836	1,001,057	323,157	0
2. Otter Tail Power Co.....	Investor-Owned	1,501,854	527,298	917,288	57,268	0
3. MDU Resources Group Inc.....	Investor-Owned	1,359,933	523,351	712,789	123,793	0
4. Basin Electric Power Coop.....	Cooperative	922,406	0	0	922,406	0
5. Cass County Electric Coop Inc.....	Cooperative	694,752	391,322	246,918	56,512	0
Total Sales, Top Five Providers.....		6,548,995	2,187,807	2,878,052	1,483,136	0
Percent of Total State Sales.....		63	59	76	50	0

See footnotes at end of tables.

Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1994, 1998, and 2003
(Megawatts)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
North Dakota							
Electric Utilities.....	4,489	4,656	4,563	0.2	99.2	99.3	97.8
Coal.....	3,867	4,068	4,107	.7	85.4	86.7	88.1
Petroleum.....	67	61	72	.8	1.5	1.3	1.5
Natural Gas.....	10	9	10	.0	.2	.2	.2
Hydroelectric.....	545	518	371	-4.2	12.0	11.0	8.0
Other Renewables.....	0	0	3	NM	.0	.0	.1
Independent Power Producers and Combined							
Heat and Power.....	37	34	101	11.8	.8	.7	2.2
Coal.....	18	18	21	1.7	.4	.4	.4
Natural Gas.....	3	0	0	NM	.1	.0	.0
Other Gases.....	7	7	8	1.5	.2	.1	.2
Other Renewables.....	9	9	72	26.0	.2	.2	1.5
Total Electric Industry.....	4,526	4,690	4,664	.3	100.0	100.0	100.0
Coal.....	3,885	4,086	4,129	.7	85.8	87.1	88.5
Petroleum.....	67	61	72	.8	1.5	1.3	1.5
Natural Gas.....	13	9	10	-2.9	.3	.2	.2
Other Gases.....	7	7	8	1.5	.2	.1	.2
Hydroelectric.....	545	518	371	-4.2	12.0	11.0	8.0
Other Renewables.....	9	9	74	26.4	.2	.2	1.6

See footnotes at end of tables.

Table 5. Electric Power Industry Generation by Primary Energy Source, 1994, 1998, and 2003
(Megawatthours)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
North Dakota							
Electric Utilities.....	29,003,713	30,518,976	31,075,012	0.8	99.5	99.5	99.2
Coal.....	27,099,914	28,176,015	29,298,347	.9	92.9	91.9	93.5
Petroleum.....	47,340	47,091	45,648	-4	.2	.2	.1
Natural Gas.....	-2	-78	-47	NM	.0	.0	.0
Hydroelectric.....	1,856,461	2,295,948	1,723,904	-8	6.4	7.5	5.5
Other Renewables	0	0	7,160	NM	.0	.0	*
Independent Power Producers and Combined							
Heat and Power	152,112	152,975	247,117	5.5	.5	.5	.8
Coal.....	81,173	80,845	128,964	5.3	.3	.3	.4
Petroleum.....	13,520	17,433	6,244	-8.2	*	.1	*
Natural Gas.....	57	807	9,493	76.5	.0	*	*
Other Gases	43,779	52,366	50,096	1.5	.1	.2	.2
Other Renewables	13,583	1,524	52,320	16.2	*	*	.2
Total Electric Industry.....	29,155,825	30,671,951	31,322,129	.8	100.0	100.0	100.0
Coal.....	27,181,087	28,256,860	29,427,311	.9	93.2	92.1	94.0
Petroleum.....	60,860	64,524	51,892	-1.8	.2	.2	.2
Natural Gas.....	55	729	9,446	77.1	.0	*	*
Other Gases	43,779	52,366	50,096	1.5	.1	.2	.2
Hydroelectric	1,856,461	2,295,948	1,723,904	-8	6.4	7.5	5.5
Other Renewables	13,583	1,524	59,480	17.8	*	*	.2

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1994, 1998, and 2003

Fuel, Quality	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
North Dakota				
Coal (cents per million Btu).....	70.4	76.2	74.2	0.6
Average heat value (Btu per pound).....	6,593	6,566	6,549	-.1
Average sulfur Content (percent).....	.8	.8	.7	-1.0
Petroleum (cents per million Btu).....	407.2	311.9	675.9	5.8
Average heat value (Btu per gallon).....	138,683	138,812	138,996	*
Average sulfur Content (percent).....	.4	.4	.4	-1.0
Natural Gas (cents per million Btu).....	375.7	369.3	744.3	7.9
Average heat value (Btu per cubic foot).....	1,095	1,050	1,029	-.7

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1994, 1998, and 2003
(Thousand Metric Tons)

Emission Type	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
North Dakota				
Sulfur Dioxide				
Coal	139	178	128	-0.9
Petroleum	*	*	*	-8.2
Natural Gas	—	—	—	NM
Other.....	—	—	*	NM
Total	139	178	128	-.9
Nitrogen Oxide				
Coal	66	91	70	.6
Petroleum	*	*	*	-6.7
Gas.....	—	—	*	NM
Other.....	—	*	*	NM
Total	66	91	70	.6
Carbon Dioxide				
Coal	30,597	31,887	31,684	.4
Petroleum	105	91	63	-5.6
Gas.....	*	2	23	60.8
Geothermal.....	—	—	—	NM
Other.....	—	—	—	NM
Total	30,702	31,980	31,770	.4

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1994, 1998, and 2003

Sector	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share			
					1994	1998	2003	
North Dakota								
Retail Sales (thousand megawatthours)								
Residential.....	3,243	3,272	3,707	1.5	42.2	39.8	35.4	
Commercial.....	1,884	2,305	3,800	8.1	24.5	28.0	36.3	
Industrial	2,011	2,187	2,954	4.4	26.2	26.6	28.2	
Other	542	456	NA	NM	7.1	5.5	NA	
Total.....	7,681	8,220	10,461	3.5	100.0	100.0	100.0	
Retail Revenue (million dollars)								
Residential.....	207	212	241	1.7	46.6	45.2	42.1	
Commercial.....	122	143	214	6.4	27.5	30.5	37.4	
Industrial	95	94	117	2.3	21.4	20.0	20.4	
Other	21	19	NA	NM	4.7	4.0	NA	
Total.....	444	469	572	2.8	100.0	100.0	100.0	
Average Retail Price (cents/kWh)								
Residential.....	6.37	6.49	6.49	.2	NA	NA	NA	
Commercial.....	6.45	6.20	5.64	-1.5	NA	NA	NA	
Industrial	4.71	4.30	3.96	-1.9	NA	NA	NA	
Other	3.82	4.27	NA	NM	NA	NA	NA	
Total.....	5.77	5.70	5.47	-6	NA	NA	NA	

See footnotes at end of tables.

Table 9. Retail Electricity Sales Statistics, 2003

Item	Full Service Providers					Other Providers		Total
	Investor-Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	
North Dakota								
Number of Entities.....	3	12	1	23	NA	NA	NA	39
Number of Retail Customers.....	213,027	11,197	18	130,081	NA	NA	NA	354,323
Retail Sales (thousand megawatthours)	4,932	279	193	5,057	NA	NA	NA	10,461
Percentage of Retail Sales	47.14	2.67	1.85	48.34	NA	NA	NA	100.00
Revenue from Retail Sales (million dollars)	291	13	3	266	NA	NA	NA	572
Percentage of Revenue.....	50.80	2.26	.49	46.45	NA	NA	NA	100.00
Average Retail Price (cents/kWh).....	5.89	4.63	1.45	5.25	NA	NA	NA	5.47

Table 9 Notes: Data are shown for All Sectors. **Full Service Providers** sell bundled electricity services (e.g., both energy and delivery) to end users. Full Service Providers may purchase electricity from others (such as Independent Power Producers or other full service providers) prior to delivery. **Other Providers** sell either the energy or the delivery services, but not both. Sales volumes and customer counts shown for Other Providers refer to delivered electricity, which is a joint activity of both energy and delivery providers; for clarity, they are reported only in the Energy column in this table. The revenue shown under Other Providers represents the revenue realized from the sale of the energy and the delivery services distinctly. "Public" entities include municipalities, State power agencies, and municipal marketing authorities. "Federal" entities are either owned or financed by the Federal Government. "Cooperatives" are electric utilities legally established to be owned by and operated for the benefit of those using its service. The cooperative will generate, transmit, and/or distribute supplies of electric energy to a specified area not being serviced by another utility. "Facility" sales represent direct electricity transactions from independent generators to end use consumers.

Other Notes: NA = Not applicable; NM = Not meaningful;

W = Withheld to avoid disclosure of individual company data;

* = Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is '1' and values under 0.5 are shown as '*').

Totals may not equal sum of components because of independent rounding;

Table 4 "Other Renewables" includes generation from municipal solid waste; Table 7 "Other" includes emissions from municipal solid waste.

Direct Use is commercial or industrial use of electricity that 1) is self-generated, 2) is produced by either the same entity that consumes the power or an affiliate, and 3) is used in direct support of a service or industrial process located within the same facility or group of facilities that houses the generating equipment. Direct use is exclusive of station use.